

REMARKS

Summary Of The Office Action & Formalities

Claims 1-17 are all the claims pending in the application. By this Amendment, Applicants are amending claims 1, 11, 14, and 15; and adding new claims 18-23. No new matter is added.

Applicants thank the Examiner for acknowledging their claim to foreign priority and for confirming that the certified copy of the priority document was received.

Claims 11-17 are rejected under 35 U.S.C. § 112, second paragraph, for the reason set forth at page 2 of the Office Action. Regarding claim 14, the Examiner states:

The recitation in claim 14 that the cylindrical grid is made in one piece with the die support is confusing since it is unclear how it further limits the structure of the die support with the only element of the die support claimed by applicant at lines 1-2 of claim 14 is the cylindrical grid itself.

Office Action at page 2. Applicants respectfully disagree. Claim 14 recites a die support, including the following elements:

- a cylindrical grid; and
- two receivers (e.g., two socket bores), one on each side of the grid to receive a respective die therein.

Each of these elements, and their particular arrangement with respect to each other clearly limits the structure of the die-support recited in the preamble of the claim.

Claims 11 is amended to be independent, thereby overcoming the Section 112 rejection of this claim.

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Claims 11-13 and 15-17 are objected to under 37 C.F.R. § 1.75(c) for the reason set forth at page 2 of the Office Action. Claims 11 is amended to be independent, and claim 15 is amended to recite the proper dependencies, thereby overcoming this objection.

The prior art rejections are summarized as follows:

1. Claims 1-3, 5-6 and 8-17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kar et al. (USP 4,531,959).

2. Claims 4 and 7 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kar et al. in view of Guillemette et al.

3. Claim 14 is rejected under 35 U.S.C. § 102(b) as being anticipated by EP 0.021,677 (Ohls).

Applicants respectfully traverse.

Claim Rejections - 35 U.S.C. § 103

1. Claims 1-3, 5-6 And 8-17 In View Of Kar et al.

In rejecting claims 1-3, 5-6 and 8-17 in view of Kar et al., the grounds of rejection state that

Kar et al. teaches the design of an apparatus for coating an optical fiber which is comprised of a die support 30, a grid 39, entry die 42 and exit die 38. Kar discloses the claimed invention except for an integral or one piece die support and grid. However, it would have been obvious to one having ordinary skill in the art at the time of invention was made to construct the Kar et al. grid and die support as one piece since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. See *Howard v. Detroit Stove Works*, 150 U.S. 164 (1893). With respect to claims 2-3 and 5-6, Kar et al. shows that the entry die and exit die are arranged such that its outer diameter is greater than the inside

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diameter of the grid. Kar et al. shows the radial face of the entry die is pressed against the first radial wall of the die support and the radial face of the exit die is pressed against the second radial wall of the die support. With respect to claims 8 and 15, Kar et al. shows the outside diameter of the die support on each side of the grid is greater than the outside diameter of the grid. With respect to claims 11-13, Kar et al. shows in Figure 2 that the coating apparatus includes a support 16 having a means for feeding coating around the grid (elements 26-27). Kar et al. shows the chamber has a volume greater than inside volume of the grid. Kar et al. teaches the coating liquid feed means include a plurality of passages discharging radially into the chamber (see Figure 3). With respect to claims (sic) 9-10 and 16-17, Kar et al. appears to show the relationship between outside diameter of die support and inside and outside diameter of the grid.

Office Action at pages 3-4. Applicants respectfully disagree.

Howard v. Detroit Stove Works does not stand for a per se rule that making integral what was formerly more than one piece only involves that which is routine skill in the art. Rather, the holding of this case is specific to the claimed subject matter directed to improvement in heating stoves. While the Court in Howard held that the claims of the “third patent , No. 206,074” were invalid in view of the prior on the basis that “it involves no invention to cast in one piece an article which has formerly been cast in two pieces and put together” (Howard at 170), this holding was reached only after generally considering the scope and content of the prior art, the level of skill in the art, and the differences between the prior art and the claimed invention.

Indeed, as clearly set forth by the Supreme Court in Graham v. John Deere Co., proper analysis of whether a claimed invention is obvious over the prior art requires consideration of:

- (1) the scope and content of the prior art,
- (2) the differences between the prior art and the claim at issue, and
- (3) The level of ordinary skill in the pertinent art.

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Graham v. John Deere Co., 383 U.S. 1; 86 S. Ct. 684; 148 U.S.P.Q. 459 (1893). In the present invention, the Examiner has not carried out this analysis, but merely concludes that it is routine skill in the art to make the integral one-piece die-support recited in Applicants' claims 1, 11, and 14.

To be sure, numerous Federal Circuit decisions confirm that there exists no such per se rule as that adopted by the Examiner to reject independent claims 1, 11, and 14. In Schenck, A.G. v. Norton Corporation, the Federal Circuit found patentable claims directed to a vibratory testing machine comprising a holding structure, a base structure, and a supporting means that form "a single integral and gaplessly continuous piece." Schenck, A.G. v. Norton Corporation 713 F.2d 782, 218 USPQ 698 (Fed. Cir. 1983). While the defendant in that case argued that the claims were invalid because it merely makes integral what had been made in four bolted pieces, the court found this argument unpersuasive.

Regarding the present invention as recited in claims 1 and 11, Kar et al. clearly does not teach or suggest "a die support" and "a grid for applying the coating to the optical fiber, the grid being an integral one-piece construction with the die-support." Similarly, Kar et al. does not teach or suggest a die support, comprising a cylindrical grid and two receivers for dies integrally formed therewith. To the contrary, Kar et al. teaches away from such structures.

Referring to Fig. 2 of Kar et al., the cylindrical flow distribution sleeve 39 is clearly a thin walled structure having feed holes 40 throughout to introduce coating fluid to the interior of the sleeve; and end flanges 41 to correctly position the sleeve with respect to the cylindrically shaped housing in both the axial and radial directions, leaving an inner chamber 53 between the

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sleeve and the housing. Clearly, it would be virtually impossible to construct the sleeve 39 and housing 30 as a one-piece integral construction. In particular, the feed holes in the sleeve need to be formed prior to introducing the sleeve into the housing. Also, the sleeve diameter must be sized to be smaller than the corresponding inner diameter of housing 30 so as to leave an annular gap for the inner chamber 53. Furthermore, the sleeve 39 is stacked on top of the sizing die 38. The sizing die is clearly a separate piece that needs to be inserted into the housing from the top (larger opening) prior to insertion of the sleeve. This would be impossible if the sleeve were somehow integrally formed with the housing.

Therefore, a die support and grid in the form of an integral one piece construction requires an entirely different structure than that disclosed in Kar et al.--to be sure, a structure not taught or even suggested by this reference or any other reference of record.

In view of at least the foregoing differences, the Examiner is kindly requested to reconsider and withdraw the rejection of claims 1-3, 5, 6, and 8-17.

Furthermore, with respect to claims 9, 10, 16, and 17, the Examiner cannot properly rely on the figures as "appearing" to disclosed the claimed relationship. Applicants respectfully maintain that the Examiner's position is technically incorrect and hinges on an improper inference drawn from the figures about the quantitative values not disclosed in the reference. It is well established that patent drawings do not define the precise dimensions of the elements and may not be relied on to show particular sizes if the specification is completely silent on the issue. See, In re Wright 569 F.2d 1124, 1127, 193 USPQ 332, 335 (CCPA 1977).

2. Claims 4 And 7 In View Of Kar et al. And Guillemette et al.

In rejecting claims 4 and 7 in view of Kar et al. and Guillemette et al., the grounds of rejection state that

Kar et al. is applied for the reasons noted above. Kar et al. fails to teach a hollow part screwed into the die support to press entry and exit die against the respective radial wall die support. However, it would have been obvious to modify the Kar et al. coating apparatus by providing a hollow part such as shown in figure 1 of Guillemette et al. (un-number element on far left side of figure 1 of Guillemette et al.) to press a die in a coating apparatus into contact with a wall of the die support for the obvious advantage facilitating maintenance on the coating apparatus.

Office Action at page 4.

Without commenting on the merits of the Examiner's position with respect to the additional features recited in claims 4 and 7, Applicants respectfully submit that these claims are allowable at least by reason of their respective dependencies.

Claim Rejections - 35 U.S.C. § 102

3. Claim 14 In View Of Ohls.

In rejecting claim 14 in view of Ohls, the grounds of rejection state that

Ohls teaches the design of a die support which includes a cylindrical grid with a receiver or opening on each side of the grid which is capable [of] receiving a die. Ohls appears to show in Figure 3 that the grid and receivers are formed as one piece.

Office Action at page 5. Applicants respectfully disagree.

In Fig. 3 of Ohls, reference numeral 56 represents a manifold that connects to individual radial bores. Clearly, the manifold does not meet the limitation of the grid recited in claim 14. Nevertheless, Applicants have amended claim 14 to further recite that the grid has through-holes

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that open into a common annular space surrounding the grid. Accordingly, claim 14 is believed to be patentable over Ohls.

New Claims

For additional claim coverage merited by the scope of the invention, Applicants are adding new claims 18-23. These claims recite: "the grid, the upstream part, and the downstream part are made from the same piece of material as an integral one-piece construction."


Accordingly, these claims are believed to be allowable over the art of record.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Submitted herewith is an Excess Claim Fee Payment Letter with fee.

Applicants hereby petition for any extension of time which may be required to maintain the pendency of this case, and any required fee, except for the Issue Fee, for such extension is to be charged to Deposit Account No. 19-4880.

Respectfully submitted,



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APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

The claims are amended as follows:

Claim 1. (Amended) A device for [apply] applying a coating to an optical fiber, the device including:

- a die support[.];
- a grid for applying the coating to the optical fiber, the grid being an integral one-piece construction [made in one piece] with the die-support[.]; and
- an entry die and an exit die disposed in the die-support on respective opposite sides of the grid and defining a passage for the optical fiber.

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Claim 11. (Amended) An installation for applying a coating to an optical fiber[, including a support in which there is disposed a device according to claim 1, the support including means for feeding coating liquid around the grid], comprising:

a device that applies a coating to an optical fiber, the device comprising:

a die support;

a grid that applies the coating to the optical fiber, the grid being an integral one-piece construction with the die-support; and

an entry die and an exit die disposed in the die-support on respective opposite sides of the grid and defining a passage for the optical fiber; and
a support for the device, the support comprising means for feeding the coating liquid around the grid.

Claim 14. (Amended) A die-support including a cylindrical grid of circular inside section [made in one piece with the die-support] and a receiver on each side of the grid to receive a respective die, wherein the cylindrical grid and the receivers form an integral one-piece construction; and wherein the grid has through-holes that open into a common annular space surrounding the grid.

Claim 15. (Amended) The die-support of claim [15] 14, wherein the outside diameter of the die-support on respective opposite sides of the grid is greater than the outside diameter of the grid.

Claims 18-23 are added as new claims.